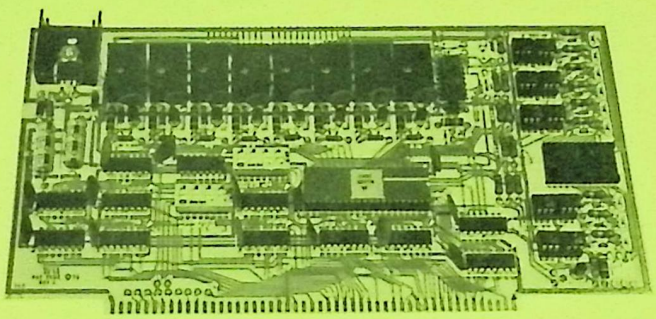
Technical Information

Altair™ 88-Process Control Interface (88-PCI)

Introduce your Altair 8800b to the diverse world of electrical, mechanical and sensory devices with the addition of the 88-Process Control Interface. By relaying various types of sensory information to the computer, the 88-PCI permits a wide range of control applications.



Applications

Whether your applications revolve around industrial, scientific, business, communication or household uses, the potential of the 88-PCI is virtually unlimited.

Some possible industrial applications include a product sorting and grading system. The 88-PCI can be interfaced with various kinds of sensors for measuring size, weight, optical density and other properties while controlling a sorting mechanism.

In the field of scientific research, an 88-PCI may be used to control environmental test conditions. Test responses can be gathered either by an 88-AD/DA converter or by the 88-PCI.

Suggested household uses include: control of thermostat settings, manual switches, lighting, lawn sprinkling and other home operations.

Features

The board consists of an eight relay output section, with each relay capable of switching 120v AC at 1 amp. Eight opto-isolators which can be configured by the user to accept a wide range of voltages make up the input section. Four more opto-isolated signal lines are arranged as two pairs of handshake lines, with the input section and output section each having one handshake pair. These lines are for control of and communication with external devices. All of the lines are completely isolated and balanced for use in environments with high levels of electrical noise.

Operation

When the board is set-up and initialized, relay control is accomplished by outputing an eight bit word to the relay control channel. Logic "1" lines will energize their respective relays, and those set to "0" will de-energize. An input from the opto-isolator input channel reads the data from the opto-isolated input lines. The interrupt structure and use of the handshake lines are under software control.

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